Date: Wed, 18 May 94 04:30:15 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #147
To: Ham-Ant

Ham-Ant Digest Wed, 18 May 94 Volume 94 : Issue 147

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

Date: Tue, 17 May 94 20:51:15 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!pipex!sunic!seunet!seunet!sdsmail!
hermod@network.ucsd.edu
Subject: ?? Need help with an external short wave radio antenna ??
To: ham-ant@ucsd.edu

salavi@unity.ncsu.edu (S. Alavi) writes:

> I need to gather some info on building an antenna for short
> wave reception? Please excuse my ignorance, I am very new at
> 1) How long should this wire be? Is it somehow related to the
> 2) should the wire be shilded or unshielded?
> 3) what should be the gauge of the wire? The thicker the better?
> 4) should the wire be the meshed type or a single thread?

Stop bothering and start making life simple. Just take whatever wire you
have (preferably made of copper) and string it between two of something
(a house and a tree, for example). If you dislike the result, put it up

between two other things of something. Even better, put up two different wires and test what gives best result.
That would give you a good start. When you know the results of all this you may start elaborating on shields, gauge, threads and you name it.

Date: Wed, 18 May 1994 01:05:29 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!wa2ise@network.ucsd.edu
Subject: Baluns and dipoles
To: ham-ant@ucsd.edu

In article <2r9kov$6pb@search01.news.aol.com> tonyh6@aol.com (TonyH6) writes:
>I'm trying to construct dipole antenna for my FM transmitter. A few of the
>books I've looked at suggest using a balun transformer between the poles.
>
>My question. Where do I find one (or how do I make one) and is it really
>necessary.
>
Probably the best way to do a balun is to take the feedline (coax) and wind the antenna end into a coil of around 4 turns about 3 inches diameter. The main purpose of the balun is to keep RF from running down the *outside* of the coax shield. Connect the dipole: one element to the center conductor of the coax, shield to the other element. and the coil an inch or two from this connection. Cheap (like no cost for the balun) and easy. I suppose that the coil forms a transmission transformer or something.

Date: 17 May 1994 21:59:02 -0400
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net
Subject: Ladder Line
To: ham-ant@ucsd.edu

In article <2o5ab6$71o@pace2.cts>, cdsorens@mtu.edu (Christopher D. Sorensen) writes:

>>Where does one aquire 450ohm transmission quality ladderline? I have seen in
>>included in those over priced dipole kits, but I haven't found it anywhere sold
>>sepperatly. Is there a suitable substitute?

You can get this ladder line from: The Radio Works (804)-484-0140. They are a mail order firm in Portsmouth, Va

---

Date: Tue, 17 May 94 19:31:12 MST
From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!torn!
uunet.ca!uunet.ca!lhaven.UUmh.Ab.Ca!Pj_Butts@network.ucsd.edu
Subject: Marine vhf/uhf antenna
To: ham-ant@ucsd.edu

In a message dated Fri 13 May 94 13:47, Bob Ross <rrross@delphi.com> wrote:

 BR> Path: dres.dnd.ca!netfs.dnd.ca!dgbt!nott!torn!howland.reston.ans.net!n
 BR> oc.near.net!news.delphi.com!usenet
 BR> From: Bob Ross <rrross@delphi.com>
 BR> Newsgroups: rec.radio.amateur.antenna
 BR> Subject: Marine vhf/uhf antenna
 BR> Date: Thu, 12 May 94 02:34:37 -0500
 BR> Organization: Delphi (info@delphi.com email, 800-695-4005 voice)
 BR> Lines: 11
 BR> Message-ID: <xGyvl8F.rrross@delphi.com>
 BR> NNTP-Posting-Host: bos1d.delphi.com

 BR> I see hundreds of boats on the water that have 2,3,4,5+ antennas
 BR> sporting
 BR> from the cab, deck etc. They all look to be "commercial" (Shakespear
 BR> etc)
 BR> antennas. Obviously, the marine band and c.b. band antennas are
 BR> available
 BR> but for some reason the comercial "ground-exempt" ham marine
 BR> comercially
 BR> made antennas seem to be overlooked.

 BR> Can anyone ID a comercial antenna maker that makes a GOOD LOOKING
 BR> 146.00 mhz
 BR> and or 440 mhz antenna that I can buy for my 19' IO?

 BR> Thanks.........
 BR>   BOB (N7RBP)
Try a line of commercial no ground plane antenna's from Sinclair/Sinclab's.
I have put them on boats before for commercial and ham freq.'s and had
very good success.They are available for both vhf and uhf freq.Good Luck.

-- Via DLG Pro v1.0

 Preferred: Pj_Butts@LHaven.UUmh.AB.CA
 Alternate: Pj.Butts@f3002.n134.z1.fidonet.org

Date: 18 May 1994 00:32:36 GMT

From: usc!howland.reston.ans.net!news.cac.psu.edu!news.pop.psu.edu!psuvax1!
news.cc.swarthmore.edu!netnews.upenn.edu!msuinfo!harbinger.cc.monash.edu.au!
bunyip.cc.uq.oz.au!@@ihnp4.ucsd.edu
Subject: Using wood as a beam material
To: ham-ant@ucsd.edu

I was just looking at some Quagi designs in the ARRL Antenna Handbook, and
I was wondering how one would have to modify these antennas if a different
beam support material was used (e.g. wood instead of plexiglass or
steatite [I think I spelled them correctly]) Are there any general rules
of thumb that are used, or is it just a case of "try it and see"?

I notice that there is a discussion of modifying designs if a different
mounting scheme is chosen for conductive boom material, but I can't seem
to find anything relating to non-conductive boom material.

Any ideas? Books to look at etc? (someone will probably tell me that this
topic *is* covered somewhere in the ARRL Antenna Handbook :-)

Tony Gedge.

--
Computer Science Department	tonyg@cs.uq.oz.au (Tony Gedge)
University of Queensland	---------------------------------
St Lucia QLD AUSTRALIA 4072	"cc stands for Cryptic Crossword"
FAX: +61 7 365 1999.	PH : +61 7 365 2445

Date: Wed, 18 May 1994 03:54:39 GMT
From: pa.dec.com!nntpd2.cxo.dec.com!iamu.chi.dec.com!little@decwrl.dec.com
Subject: Using wood as a beam material
To: ham-ant@ucsd.edu

In article <2rbnn4$lus@uqcspe.cs.uq.oz.au>, tonyg@cs.uq.oz.au (Tony Gedge) writes:
|>I was just looking at some Quagi designs in the ARRL Antenna Handbook, and
|>I was wondering how one would have to modify these antennas if a different
|>beam support material was used (e.g. wood instead of plexiglass or
|>steatite [I think I spelled them correctly]) Are there any general rules
|>of thumb that are used, or is it just a case of "try it and see"?

A wood or other non-conductive boom will be invisible (to radio waves) when dry.
You might run into a problem if the material gets wet. The ARRL Antenna
Book talks about sealing wood with parafin. Fiberglass or plexiglass should
be fine replacement for wood, although you probably want to seal the fiberglass
with a good exterior varnish or polyurethane to protect it from the weather
and keep it dry. Also a good finish would promote beading which would help
reduce the effects of surface moisture.

73,
Todd
N9MWB

Date: 17 May 1994 21:42:10 -0700
From: nntp.crl.com!crl2.crl.com!not-for-mail@decwrl.dec.com
Subject: Using wood as a beam material
To: ham-ant@ucsd.edu

Todd Little (little@iamu.chi.dec.com) wrote:

: In article <2rbnn4$lus@uqcspe.cs.uq.oz.au>, tonyg@cs.uq.oz.au (Tony Gedge)
writes:
: |>I was just looking at some Quagi designs in the ARRL Antenna Handbook, and
: |>I was wondering how one would have to modify these antennas if a different
: |>beam support material was used (e.g. wood instead of plexiglass or
: |>steatite [I think I spelled them correctly]) Are there any general rules
: |>of thumb that are used, or is it just a case of "try it and see"?

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: You might run into a problem if the material gets wet. The ARRL Antenna
: Book talks about sealing wood with parafin. Fiberglass or plexiglass should
: be fine replacement for wood, although you probably want to seal the fiberglass
: with a good exterior varnish or polyurethane to protect it from the weather
: and keep it dry. Also a good finish would promote beading which would help
: reduce the effects of surface moisture.

: 73,
: Todd
: N9MWB

I once built a two meter quagi with a 1 X 2 piece of wood for the boom.

I drilled holes in the wooden boom for the elements and then glued them
in place. After that, I put a couple of coats of polyurethane on it.

It was easy to build and worked great.

About every two years I had to re-varnish the boom, but that was no
big problem.

The only problem is that the boom somtimes will warp and twist which
makes the beam look strange. It didnt affect the performance.

Have fun,

Smitty, NA5K
--
Henry Smith (hbs@crl.com)

Date: 18 May 94 00:41:23 GMT
From: dog.ee.lbl.gov!ihnp4.ucsd.edu!news.cerf.net!ent-img.com!wb6hqk!
bart@ucbvax.berkeley.edu
To: ham-ant@ucsd.edu

References <2qr1ua$hnm@chnews.intel.com>, <2qrn77$cgd@taco.cc.ncsu.edu>,
<JIwtFDI.arvahudson@delphi.com>
Subject : Re: A "shorty" 40 M mobile antenna

In article <JIwtFDI.arvahudson@delphi.com>,
Arva Hudson <arvahudson@delphi.com> wrote:
>hi
>Am interested in 20 meter mobile using a base loaded whip on the middle of the
>roof of my Tauras wagon. Probably with a 64 inch whip and 3 inch spring. Do
>you think there will be much ground plane component to be effective?
>
How do you plan on loading it and what is the radiator diameter? Assuming the
loading coil is on the radiator somewhere and you aren't intending to tune
it with a matchbox through several feet of transmission line, it will
work reasonably well, probably better than the same antenna bumper
mounted due to the lower ground losses. If you double the radiator
length you can expect around a 6 db increase in effective radiated
power but not too much better receive performance.

bart   wb6hqk

bart@wb6hqk.ent-img.com

End of Ham-Ant Digest V94 #147
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